

Different types of tanning



Three key methods

There are three key tanning methods used to make leather: chrome tanning, vegetable tanning and chrome-free tanning

About 75% of leather made today is chrome tanned.

The process uses trivalent chromium (Cr III), which is a safe substance that also represents an essential part of our diet with many people taking daily supplements that contain it.

Misinformation about the leather industry sometimes suggests that hexavalent chrome, or chromium VI (Cr VI) is used and that it is carcinogenic. Chromium VI is not used in the manufacture of leather and there are clear and effective industry guidelines set out by the Leather Working Group to prevent its formation in leather post-tanning.

The process of chrome tanning is constantly being upgraded by better uptake, less usage, comprehensive recycling, reduced water consumption and careful management of waste. Best practices of chrome tanning use half the chemicals required by other methods and produces effluent content below legal requirements. Chrome tanning produces consistent leathers that can be used or worn year after year without any loss of properties.



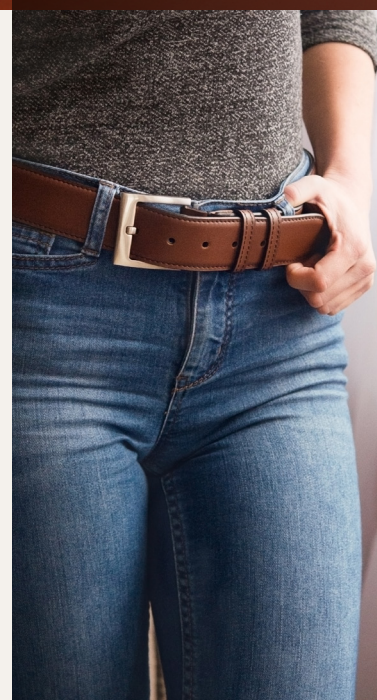
Tanning methods

Vegetable tanning is the oldest tanning method, it uses extracts from wood, and nuts of trees and shrubs with responsible suppliers ensuring these are from a sustainable source.

It usually takes longer to tan leather using this method, but the result is a leather with distinctive aesthetic and handle that ages beautifully. The name and tanning materials used makes it easy to think that vegetable tanned leather is more 'eco-friendly' but the balance across the whole process needs to be looked at to make a more meaningful comparison with other methods. For example, vegetable tanning uses a few times the amount of tannins than for chrome-tanned leathers. The effluent produced also requires more treatment before it can be discharged. However, it has the benefit of using natural, sustainable and renewable raw materials.

All other tanning methods, are known by different labels but are usually grouped and referred to as 'chrome-free'.

Chrome-free leathers are usually made for a specialized performance requirement or often specified for automotive use. The most common is the aldehyde tanning that utilizes glutaraldehyde. Leathers made with this tanning agent require relatively more chemicals after tanning to improve the leather properties. For this reason the effluent of chrome-free process will require additional treatment before it can be discharged.



Tanning methods

Which is the best tanning method?

All tanning methods are well managed in production and when all the variables are considered, there is little difference between them regarding the environmental impact.

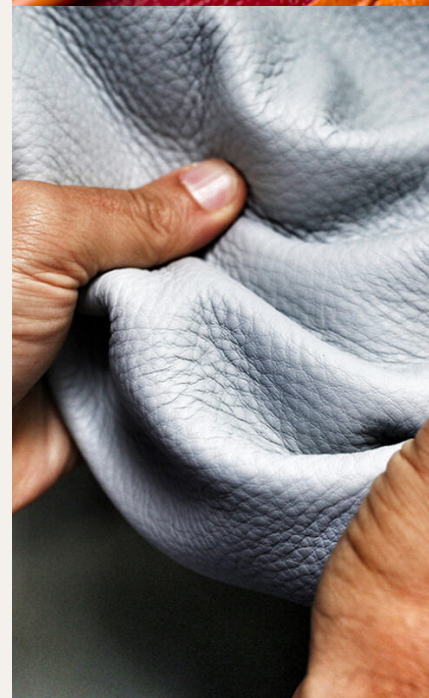
Chrome tanning makes a consistent product that is versatile across a wide range of uses, vegetable tanned leather uses natural resources to create its own unique look and handle but like the chrome-free they generate effluent that requires additional treatment. Chrome free leathers have heat and dimensional stability and other properties that are unique.

The requirements of the type of leather needed for a specific application (properties, design and cost) will determine which is the best tanning method to be used. There is little competition among them because of the unique properties that each tannage builds in the leather.

Learn more with leather naturally

Leather Naturally promotes the use of globally-manufactured sustainable leather.

Its website www.leathernaturally.org is a key resource for information about modern leather manufacturing and the part it plays in a more sustainable society.



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